DOCUMENT RESUME

ED 135 561 RC 009 726

AUTHOR Stinner, William F.; And Others
TITLE Sex Differentials in Educational and Labor Force Role Distributions in the Philippines.
PUB DATE Aug 76
NOTE 49p.; Paper presented at the World Congress of Rural Sociology (4th, Torun, Poland, August 1976)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Academic Achievement; Adults; Age; Census Figures; Cohort Analysis; Comparative Analysis; Employment Level; *Females; Foreign Countries; Industrialization; *Labor Force; Literacy; *Males; Middle Aged; Occupations; Rural Population; *Rural Urban Differences; Sex Differences; Statistical Data; Urban Population; Working Women; Young Adults
IDENTIFIERS *Philippines; World Congress of Rural Sociology (4th)

ABSTRACT

The transformation of the educational and labor force role distribution of Filipino women, both absolutely and relative to Filipino men, under the impact of modernization was examined. The study aimed to: analyze differences in female educational and labor force role distributions by modernization level; compare the female educational and labor force role distribution to that of males by modernization level; and contrast sex differentials in educational and labor force role distributions by modernization level for a younger (25-34) and older (55-64) age cohort. Obtained from the 1970 Philippines population census, data were collected for both males and females aged 25-64 on literacy; level of educational attainment; major field of study of associate, college and post-graduate degree holders; major and minor industry; major and minor occupation; and class of worker. Data were compiled for three residential categories: Manila, urban areas outside Manila, and rural areas. A combination of size-density and "urban characteristics" criteria was used in the 1970 census to delineate urban areas. Findings included: 72% of rural females aged 25-64 were literate, compared to 95% of Manila women in the same age range; the gap between males and females was largest in the rural areas; 3 of 5 rural women aged 25-64 had less than 5 years of formal schooling; and 2 out of 5 rural women aged 25-64 were engaged in farm laborer work roles. (NQ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

rev 06-12-77

ED135561

SEX DIFFERENTIALS IN EDUCATIONAL AND LABOR FORCE ROLE DISTRIBUTIONS IN THE PHILIPPINES

By

William F. Stinner
Department of Sociology
and
Population Research Laboratory
Utah State University
Logan, Utah 84322
U.S.A.

and

Hector B. Morada
Maria Lourdes Juan
Myrna Gonzalez

National Census and Statistics Office
Manila, Philippines

U.S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

1. Paper prepared for presentation at the IVth World Congress of Rural Sociology, Torun, Poland, August 9-13, 1976.

2. The authors acknowledge the kind assistance of Dr. Tito Mijares, Director, Philippines National Census and Statistics Office, in supplying the copies of the census volumes on which the study is based. These volumes were supplied as part of a joint research-training programme in the Department of Sociology at Utah State University sponsored by the United Nations Development Programme and coordinated by Dr. Mijares and Dr. Yun Kim, United Nations Technical Consultant to the National Census and Statistics Office in the Philippines and Head of the Department of Sociology and Director of the Population Research Laboratory at Utah State University. Mr. Morada received an M.S. degree from Utah State University under this programme, while Ms. Juan and Ms. Gonzalez are currently in the process of completing the requirements for their degree.

3. Seminar 14: The Changing Roles of Women in Rural Society

RC009726

INTRODUCTION

Modernization theorists operating within the Durkheimian framework have stressed increasing differentiation as a prime component of the modernization process (see, for example, Eisenstadt, 1957; Smelser, 1963; Smelser and Lipset, 1966). Structural differentiation concerns changes in and the proliferation of social roles. For example, modernization produces in its wake new social roles associated with increased literacy and higher levels of educational attainment, changes in the educational curriculum, industrial and occupational transformation, the monetization of the economy and the ecological separation of place of work and residence. However, as Matras (1973: 144) has suggested, ". . . societies sharing social roles and social systems may vary with respect to the way in which their members are distributed among them." Given deficiencies in a society's allocative mechanism, through restrictions on access or recruitment to emergent social roles, various societal subgroups are differentially distributed across a society's role structure. Ascriptive criteria present at birth such as age, sex, place of birth, race and ethnicity oftentimes form the cornerstone for restrictive entree to emergent social roles in the process of modernization and, hence, differential and, more often than not, inferior placement of selected societal subgroups within the total role structure of the society.

It has been, nonetheless, the conventional wisdom that female status is lowest in pre-industrial settings but improves with modernization. Interestingly, in recent years, however, this postulated invariant relationship has come under closer scrutiny and its inevitability called into question (Boserup, 1970; Youssef, 1971; Tinker, 1975; Germain, 1975; Danforth, 1975. For a review of the literature in the Latin American context, see Knaster, 1976).

In the present research, an examination is made of the transformation of the educational and labor force role distributions of Filipino women, both absolutely and relative to Filipino men, under the impact of modernization. Researchers into the female role in the Philippines have generally pointed to the relatively higher status of Filipino women as compared to other women in Asia (see, for example, Fox, 1963; Hunt, 1965; Castillo and Hilomen-Guerrero, 1969; Jacobson, 1974). However, Castillo (1975:245) in a recent paper laments the gap between the imagery and the reality of Filipino women as manpower. She notes the disparities between Manila, the political, commercial, administrative and industrial capital of the nation, and the remainder of the country, and argues that ". . . the life and status of the Filipino woman cannot be viewed apart from the stage of development and the socioeconomic patterns prevailing in the country." (Castillo, 1976:237).

In the light of the above, we set for ourselves three objectives: (1) to analyze differences in female educational and labor force role distributions by level of modernization, (2) to compare the female educational and labor force role distribution to that of males by level of modernization, and (3) to contrast sex differentials in educational and labor force role distributions by level of modernization for a younger and older age cohort.

Matras (1973:148-149) has defined a role distribution as ". . . a distribution of the population over the set of distinct role profiles in the society . . ." and a role profile in turn is defined as a ". . . set of all roles occupied by a given individual." In essence, a role distribution is equivalent to a demographer's notion of population composition by categories. We adhere to this conceptualization in this investigation.

DATA AND PROCEDURES

The data for this analysis are obtained from the published national summary and Manila volumes of the 1970 Philippines census of population. Data were collected for both males and females aged 25-64 on literacy, level of educational attainment, major field of study of associate, college and post-graduate degree holders, major and minor industry, major and minor occupation and class of worker.

The above data were compiled for three residential categories, including Manila, urban areas outside Manila (also referred to as provincial urban areas) and rural areas. The Philippines National Census and Statistics Office employed a combination of size-density and "urban characteristics" criteria for delineating urban areas in the 1970 census. This trichotomous classification represents a continuum of modernization ranging from a low point in the rural areas to a high in Manila.

Residential variations in absolute and relative female literacy, educational attainment, field of study and labor force roles are analyzed utilizing percentage distribution analysis, the index of dissimilarity, and percentage differences in each category of the relevant role distributions. The index of dissimilarity measures the degree to which one distribution differs from another, or phrased somewhat differently, the mimimum proportion of the population in one distribution that would have to shift locations in order for that distribution to conform to a comparison distribution.

The index of dissimilarity is measured as follows:

$$\Delta = \tfrac{1}{2} \sum_{i=1}^{n} / X_i - Y_i /$$

In the above formula X and Y are the relevant distributions, the subgroups of which are denoted by the subscript i. The absolute percentage differences between each subgroup of X and Y are summated without regard to sign and then multiplied by ½ to produce Δ, the index of dissimilarity. The index of dissimilarity, however, provides no clue as to the direction of categorical differences within the overall distribution. As such, we calculate the absolute percentage difference between males and females in each distributional category for each residence and age group. In those categories where the female percentage is higher than that found for males, females are considered to be overrepresented, whereas in those categories where the female percentage is lower, they are considered to be underrepresented.

The phases of the investigation consist of: (1) an analysis of the pattern of the female role distribution across the residential categories using percentage distributions; (2) an assessment of residential variation in the sex differential for the relevant distribution employing the index of dissimilarity for the total distribution and absolute percentage point differences for the categorical variations within the relevant distribution; and (3) a comparison of the above patterns for a younger cohort aged 25-34 and an older cohort aged 55-64.

FINDINGS

Literacy

Table 1 contains a breakdown of sex differentials in literacy by age and residence. Seventy-two percent of rural females aged 25-64 are literate, compared to 95 percent of Manila women in the same age range. The gap between males and females is largest in the rural areas and decreases gradually

in urban areas outside Manila and Manila itself. More specifically, the literacy rate of rural males is 6 percent above that of rural females, while in Manila the literacy rate of men is only slightly more than 2 percent above that of women.

A comparison of the rate of literacy between rural females in the younger and older cohorts, respectively, reveals a literacy level in the younger cohort approximately 31 percent higher than in the older cohort (83 vs. 52 percent). This rate of improvement is greater than that noted for rural males inthe same two age categories (85 vs. 63 percent). In the older cohort the level of literacy among rural women is about 37 percent lower than Manila women in the same cohort; however, among the younger women, the rural female literacy level is less than 15 percent below that found for Manila women in the same age cohort. The sex differential among the older women in the rural areas is twice that found among older women in Manila. Among younger women there is virtually no difference in the sex differential across the three residence categories.

Educational Attainment

A more detailed view of the educational status of Filipino men and women is presented in Table 2. From this table it can be gleaned that about 3 of 5 rural women aged 25-64 years of age have had less than 5 years of formal schooling. One out of four rural women have had no formal schooling whatsoever. On the other hand, less than 7 percent of rural women in the above age range have the equivalent of a high school degree or more. Women in Manila and urban areas outside of Manila have lower percentages of women with formal educational attainment of 7 years or less and higher percentages of women with at least some high school education than do their counterparts

in the rural areas. The percentage of rural women with no formal educational attainment is six times that found in Manila. Conversely, the percentage of rural women with a high school degree or higher is only one-seventh that found for women residing in Manila and the percentage with at least a college degree is only one-fifth that found for Manila women.

The sex differential in educational attainment in the rural areas is one half that found in Manila (Δ = 5.7 and 12.3, respectively). In other words, the educational role distribution of Filipino females more closely approximates that of males in the rural areas than in Manila. In the rural areas women are overrepresented in the two lowest educational categories and especially among persons with no formal education. Interestingly, they are also slightly overrepresented in the highest level of the educational hierarchy. On the other hand, rural women are underrepresented in the intermediate classifications and especially in the two high school categories.

Filipino women's overrepresentation in the lowest educational classes is lower in provincial urban areas and Manila than in the rural areas, while the opposite is the case in the 1-4 bracket. Underrepresentation of Filipino women in the 1-3 years high school bracket increases with increasing urbanization, while underrepresentation in the 1-3 year college class declines. Whereas Filipino women with college degrees or higher are slightly overrepresented in the rural areas, they are underrepresented in provincial urban areas and especially so in Manila.

There is a considerable contraction in the rural-urban differences in no formal educational attainment among younger Filipino women (13 vs. 34 percent among older women). Conversely, there is a sizable expansion of the rural-urban difference in completed high school or more in the younger cohort of women (52 vs. 26 percent in the older cohort). The above patterns reflect

a complementary pattern of substantial reduction of nonschooled females in the rural areas and considerable expansion of females with at least a high school degree in Manila and other urban areas. Younger rural females, therefore, appear to be filling in the interstices between the lowest and highest rungs of the educational hierarchy.

The rural-urban pattern of the index of dissimilarity for the two age cohorts is similar to that found for all women aged 25-64, although in the younger cohort the index is lower in each of the residential categories. Thus, in the younger cohort the educational distributions of men and women in each of the residential settings are less dissimilar than is the case in the older cohort. Moreover, there is less of a rural-urban discrepancy in the index in the younger cohort than in the older cohort.

There is a contraction of the rural-urban difference in the sex differential in the "no formal education" category from 7 percent in the older cohort to about 2 percent in the younger cohort. This pattern is brought about largely by the sizable drop in female overrepresentation in this stratum in the rural areas. At the upper end of the educational hierarchy there is generally a contraction of the rural-urban difference in the underrepresentation of women found in the older cohort. In fact, in rural and provincial urban locations, there is a slight overrepresentation of women in the "completed college" category in the younger cohort compared to an underrepresentation in the older cohort in the same two areas.

Major Field of Study

Table 3 presents the curriculum of Filipino men and women holding associate, college and post-graduate degrees by residence and age. Four out of five rural women with post-high school degrees have their degrees in education

curricula. Another 7 percent have their diplomas in medical science and nearly 6 percent in commerce. Less than 1 percent of female degree holders in the rural setting have their credentials in agriculture. Thus, the three curricula of education, medical science and commerce account for over 94 percent of the degrees held by rural women aged 25-64. In contrast, the percentage of Manila women with post-high school degrees in education is only about one half of that found among rural women. Conversely, the percentage of female degree holders in Manila having their degrees in commerce is six times, liberal arts close to four times, and medical science more than twice that found in rural areas. As can be readily seen, the female curriculum distribution in Manila is considerably more diversified than is that in the rural setting.

The index of dissimilarity between male and female curriculum distributions increases with decreasing rurality. That is, urban residence is associated with a heightened dissimilarity in the curriculum distributions of men and women. In none of the settings, however, would less than 40 percent of Filipino women have to change their curriculum to conform to that of Filipino men. The primary focus of sex differentiation in the rural setting is a high degree of feminine overrepresentation in education complemented by a somewhat higher overrepresentation in medical science. Conversely, rural women are underrepresented primarily in engineering and commerce and secondarily in law and agriculture. Female overrepresentation among education degree holders increases in provincial urban areas and declines in Manila where it is slightly lower than in the rural areas. The overrepresentation of women in medical science increases with decreasing rurality and is close to 7 percent higher in Manila than in the rural areas. Female underrepresentation in engineering and law likewise increases with decreasing rurality

with engineering showing a slightly greater rural-urban difference. Female underrepresentation in commerce is highest in provincial urban areas and decreases somewhat in Manila; however, the degree of underrepresentation in Manila is still higher than is found in the rural areas.

Very little difference is evident in the curriculum distribution of younger and older rural Filipino women. Education remains the significant field of study with nearly 77 percent of young rural women possessing this degree compared to 81 percent of older rural women. The main difference in the two distributions is the fivefold difference in commerce degree holders. Over 10 percent of young rural female degree holders have their degrees in commerce, compared with less than 2 percent of the older cohort. There is a substantial augmentation of the rural-urban differential in education in the younger cohort (45 vs. 17 percent) reflecting a considerably lower proportion of younger Manila women in this curriculum compared with their older counterparts. At the same time, the rural-urban differential in female commerce degree holders in the younger cohort is more than four times that found for the older cohort (30 vs. 7 percent). The rural-urban difference in female medical science degree holders is slightly less in the younger than in the older cohort.

The rural-urban pattern in the index of dissimilarity is different for the two age cohorts. In the older age cohort the index increases with decreasing rurality, while in the younger cohort the index is highest in provincial urban areas and lowest in Manila. In the rural areas the index is higher in the younger cohort, while in the provincial urban setting and Manila the younger cohorts portray a lower index and this is especially the case in Manila.

The overrepresentation of rural women in education and medical science is 3-5 percent higher in the younger than in the older cohort. The underrepresentation of rural women in engineering in the younger cohort is double that found in the older cohort, while their underrepresentation in commerce and agriculture is only slightly higher than that found in the older cohort. The underrepresentation of rural females in law is diminished by about one half in the younger cohort.

There is a contraction in the rural-urban difference in feminine overrepresentation in education and medical science in the younger cohort. Although each residential area in both younger and older cohorts demonstrate female underrepresentation in commerce, there is a reversal of direction. In the older cohort decreasing rurality is accompanied by increased female underrepresentation in commerce, whereas in the younger cohort decreasing rurality signifies decreased underrepresentation. This contrasting pattern results from a substantially lower underrepresentation of women in the younger cohort in both Manila and provincial urban areas, while the degree of underrepresentation in the rural setting remains stable. The rural-urban difference in the degree of female underrepresentation in engineering is somewhat higher in the younger than in the older cohort due to a somewhat larger increase in Manila than in the rural areas. Finally, there is a considerable diminishment in the rural-urban difference in the sex differential in law degrees from 9 percent in the older cohort to 4 percent in the younger cohort due to the substantially greater reduction in Manila compared to the rural areas.

Industry

Table 4 presents a portrayal of the sex differentials in the industrial role distribution by age and residence. Slightly more than one half of

employed rural Filipino women are engaged in agriculture, one-fifth in textiles and one-tenth each in commerce and services other than domestic. As would be expected, there is a sharp drop in female participation in agriculture with increasing urbanity of residence. In contrast, nearly one half of Manila women are located in the service sector. Female participation in domestic services in Manila is close to four times that of rural women and participation in other services is about three times that found for rural women. Nearly one-quarter of employed Manila women are in commerce, more than twice that found among employed rural women. Finally, there is only a minimal difference in the level of female manufacturing employment between rural and urban areas and this is accounted for by a slight rise in the level of non-textile manufacturing employment.

The dissimilarity between the male and female industrial role distribution is highest in urban areas outside Manila ($\Delta = 48.2$) and lowest in the rural areas ($\Delta = 37.3$). The main axes of differentiation in the rural areas are the sizable underrepresentation of rural women in the agricultural sector and their overrepresentation in textiles and secondarily in commerce and service. Thus, although a slight majority of rural women are engaged in agricultural activities, their participation is considerably below that of rural men.

The overrepresentation of females in service activities is higher in Manila than in rural areas. However, this reflects a combination of an increased overrepresentation in domestic service and a lowered overrepresentation in service employment other than domestic. The overrepresentation of women in nondomestic service activities in urban areas outside of Manila is above that of both Manila and rural locales. A pattern similar to the above is also evident for commerce.

The rural-urban pattern in sex differentials in manufacturing activity is reflective of varying configurations in textile and nontextile activity, respectively. There is only a slight drop in the overconcentration of women in textiles with decreasing rurality; however, there is a sharp increase in the extent of female underrepresentation in nontextile manufacturing activity. In Manila the degree of female underrepresentation in the transport sector is over four times and their underrepresentation in construction activity is twice that found in rural areas.

Younger rural women exhibit a 14 percent lower level of participation in agriculture, and a 4.5 percent lower level in commerce than older rural women. Higher female participation levels in the younger cohort relative to the older cohort are found in textiles (9 percent) and services (11 percent), the bulk of which is accounted for by services other than domestic. Nontextile manufacturing activity is minimally lower among younger rural women than older rural women.

Since the prime locus of agricultural activity is in the rural areas, the lower female participation in agricultural pursuits for the younger cohort in rural areas implies a lower rural-urban differential in female agricultural participation. There is no change in the rural-urban differential in service employment across the two age cohorts. Nevertheless, this reflects the combined effect of a slightly higher rural-urban differential in domestic services and a somewhat lower rural-urban differential in nondomestic services. Rural-urban differences in female engagement in commerce amount to 10 percent in the younger cohort, approximately one half of that found in the older cohort.

In the younger cohort female participation in textiles is about 5 percent lower in Manila than in the rural areas, a reversal of the pattern found

in the older cohort. Female participation in nontextile manufacturing activity in Manila, however, is 3 percent higher than in the rural areas which reverses the patterns found in the older cohort. The combined effect of these two divergent patterns is a female participation level in manufacturing in the younger cohort in Manila slightly lower than that in the rural areas compared to a slightly higher level in the older cohort.

There is no basic change in the overall curvilinear rural-urban pattern of the index of dissimilarity from that found for all women aged 25-64. However, in each residence category the index of dissimilarity is higher for the younger cohort than for the older cohort, although the level of increase varies directly with rurality of residence. Among younger rural women there is greater underrepresentation in agriculture than is found among older rural women (about 7 percent) and secondarily in transport (about 4 percent). On the other hand, overrepresentation of rural women in textiles is higher in the younger cohort than in the older cohort (7 percent), while their overrepresentation in commerce is about 4 percent lower in the younger than in the older cohort. Both domestic and nondomestic service activity show a higher overrepresentation of women in the younger than in the older age grouping, although the difference is substantially greater in the case of nondomestic activity.

The rural-urban differences in the sex differential in agricultural activity are larger in the younger than in the older cohort resulting from the higher underrepresentation of rural women and the lower underrepresentation of provincial urban and Manila women in agricultural activity. Sex differentials in textile activity across the rural-urban residential classification are likewise higher in the younger than in the older age cohort reflecting a

larger increase in female overrepresentation across age cohorts in the rural areas than in Manila. In nontextile manufacturing activity the rural-urban difference remained at about 13 percent in both younger and older cohorts, reflecting increased underrepresentation of women in provincial urban areas and Manila and a shift in rural areas from slight female overrepresentation in the older cohort to underrepresentation in the younger cohort.

The contrast in the sex differential in the service sector between Manila and rural areas is higher in the younger than in the older cohort by nearly 6 percent. However, when service activity is partitioned into domestic and nondomestic activity, it can be seen that the bulk of this high differential in the younger cohort is due to a relatively greater increase in female overrepresentation in domestic service activity in Manila than in rural areas. However, this is not to discount the substantial rise in female overrepresentation in the nondomestic sector in each residential area and especially in the provincial urban setting.

Occupation

A portrayal of sex differentials in eleven occupational roles by age and residence is presented in Table 5. Two out of five employed rural women aged 25-64 are engaged in farm laborer work roles. Slightly more than 22 percent of employed rural women are in the crafts. Sales, professional or technical, and farmer/farm manager work roles each contain about one in ten rural women. It can thus be seen that rural women engaged in farm-related work roles are four times more likely to be employed as farm laborers than as farmers or farm managers.

As would be anticipated, there is a substantial drop in farm-related occupations with decreasing rurality. Less than 1 percent of employed Manila

women are in farm-related occupations. Conversely, the level of female clerical employment in Manila is sixteen times, service employment three times and professional/technical work roles more than twice that found in the rural setting. One-fifth of Manila women are engaged in sales occupations, compared to 11 percent in the rural sector. There is virtually no association between the degree of rurality and percentage of women in the crafts.

There is a positive association between the degree of residential rurality and the dissimilarity of the male and female occupational role distributions. Fifty-nine percent of employed rural women would have to switch occupations to produce an occupational distribution equivalent to that of employed rural men, whereas in Manila only 25 percent of employed women would have to make such a switch.

The main dimensions underlying the high delta in the rural areas is the sizable underrepresentation of employed rural women in farmer/farm manager work roles (48 percent) and their relatively greater concentration in farm laborer work roles (30.5 percent), crafts (13.5 percent), sales (8.7 percent) and professional/technical occupational roles (6.9 percent). It is interesting to note, however, that the primary axis for differentiation lies within the farmer stratum and only secondarily across the farm/nonfarm boundary.

The various occupational strata portray divergent associations of the sex differential with rurality of residence. The degree of female underrepresentation in the farmer/farm manager stratum is reduced markedly with decreasing residential rurality, while the sizable degree of overrepresentation in farm laborer work roles is reversed in Manila where a slight underrepresentation of women is evident. Whereas women are overrepresented in the crafts in the rural areas, they are slightly underrepresented in Manila and

the provincial urban locales. Whereas female representation in the service sector is 3 percent above that of males in the rural setting, it is close to 8 percent in Manila. The underrepresentation of females in transport increases with decreasing rurality.

In the white collar occupations a curvilinear rural-urban pattern of sex differentials in occupational roles is evident in the sales and professional/technical stratum, i.e., higher female overrepresentation in provincial urban areas than in either Manila or the rural setting. In the clerical stratum, there is very little difference in the male-female percentages in any of the three residential settings, although the urban areas tend towards female overrepresentation, while in the rural areas there is a rough equivalence. Finally, there is also very little male-female variation in administrative/executive positions, though urban areas tend towards slight female underrepresentation compared to minimal overrepresentation in the rural areas.

Very little difference is evident between younger and older cohorts in the percentage of employed rural women in farm laborer work roles. However, the percentage of younger employed rural women in farmer/farm manager work roles is only one-third of that for older women. In the nonfarm sector, younger rural women are more likely to be in the crafts (25 vs. 19 percent) and professional/technical (11 vs. 4 percent) occupations than older rural women. A slightly larger percentage of younger than older rural women is also found in the service occupations (6 vs. 3 percent). On the other hand, younger rural women are less likely to be in sales work roles than older rural women (9 vs. 14 percent).

The rural-urban difference in the percentage of women in the farmer/farm manager and farm laborer stratum is less in the younger than in the older cohort, but especially so in the case of the farmer, given the

substantially lower participation of younger rural women in farmer/farm manager work roles. There is a contraction of the rural-urban difference in female participation in professional/technical and sales occupations in the younger cohort. On the other hand, the rural-urban gap in female clerical activity expands in the younger cohort while a slight expansion is also evident in the service occupations. Finally, the 1 percent lower percentage of female craft employment in Manila for the older cohort expands to 5 percent in the younger cohort.

The rural-urban pattern in the index of dissimilarity noted for all women aged 25-64 characterizes both the younger and the older age grouping. A slight increase in the index is noted among younger Manila women, whereas the deltas in urban areas outside Manila and the rural areas are roughly equivalent for both age cohorts.

Considering related occupational roles in the rural setting, we note a lower degree of female overrepresentation in farm labor and underrepresentation in the farmer/farm manager stratum in the younger than in the older age cohorts. Outside the farm strata there is a tendency for both female overrepresentation and underrepresentation to become more pronounced in the younger cohort with the main exception being the sales stratum where female overrepresentation in the younger cohort is less than that found for the older cohort. Female overrepresentation in professional/technical, craft, and service occupational roles in the older cohort expands in the younger cohort. On the other hand, female underrepresentation in transport and stevedoring increases also in the younger cohort. A minimal underrepresentation of rural women in administrative/executive and clerical occupations in the older age group becomes a slight overrepresentation in the younger cohort.

The rural-urban difference in the sex differential in farm-related occupations contracts somewhat in the younger cohort due to the decline in the overrepresentation in the farm laborer stratum and underrepresentation in the farmer/farm manager stratum in the younger cohort. The relatively greater increase in the overrepresentation of females in service employment among younger Manila women as compared to younger rural women results in an expansion of the rural-urban difference in the sex differential in the service stratum. The rural-urban dissimilarity in the craft sex differential is larger in the younger than in the older cohort reflecting an increased overrepresentation of rural women in this stratum and an increased underrepresentation of Manila women in this occupational role. Virtually no intercohort change is evident in the rural-urban difference in the underrepresentation of women in transport occupations.

In the white collar occupations the curvilinear pattern noted for all women in the professional/technical and sales occupations is also noticeable in each cohort, though more pronounced in the older cohort for sales and the younger cohort for professional/technical occupational roles. There is increased overrepresentation of females with decreasing rurality in the clerical stratum in the younger cohort compared to increasing underrepresentation in the older cohort with decreasing rurality. Finally, a slight decline in the rural-urban difference in administrative/executive occupations is noted in the younger cohort emanating from lower female underrepresentation in the younger cohort in provincial urban areas and Manila and a shift from minimal underrepresentation in the older cohort in rural areas to minimal overrepresentation in the younger cohort of those areas.

Given the relative importance of the professional/technical stratum in the female occupational role distribution, a closer analysis of this stratum

is presented in Table 6. The dominance of the teaching profession among Filipino women professionals is immediately evident, and especially so in the rural areas. Eighty-eight percent of rural female professionals are engaged in teaching compared to 78 percent in provincial urban areas and 59 percent in Manila. Close to 8 percent of professional women in rural areas are in paraprofessional medical occupational roles which increases to 11 percent in Manila. Increased female participation in the natural sciences and traditional medical professional roles is also evident with decreasing rurality. Finally, there is a sevenfold increase in the percentage of women engaged in those professional roles not specifically delineated in this analysis.

The index of dissimilarity in the rural areas is approximately one half of that found in Manila, a reversal of the pattern noted for all occupations. The overrepresentation of females in the teaching profession increases with decreasing residential rurality as does their overrepresentation in paramedical pursuits. On the other hand, decreasing rurality is also associated with increased female underrepresentation in engineering-related and legal as well as the professional occupational roles. In the natural sciences females are somewhat underrepresented in rural and provincial urban areas and somewhat overrepresented in Manila. The remaining traditional medical professions demonstrate female underrepresentation in each residential area with the highest underrepresentation in provincial urban locales.

A considerably higher proportion of younger rural women is in the teaching profession than older women (88 vs. 68 percent). Moreover, in the older cohort the percentage of rural professional women in teaching is less than in Manila, while in the younger cohort a reversal of this pattern is noticeable. At the same time there is a shift from a positive association

between rurality and female concentration in paramedical pursuits in the older cohort to a negative relationship in the younger cohort. In both younger and older cohorts there is an inverse relationship between the degree of rurality and the percentage of professional women in traditional legal and medical professions.

The rural-urban pattern in the index of dissimilarity is similar in both age cohorts to that observed for all women aged 25-64. However, the rural-urban gap in the index is somewhat smaller in the younger cohort due to a small increment in the rural setting and a correspondingly small decrement in Manila. An overview of rural-urban differences in the sex differential within each of the age cohorts reveals a sizable contraction in the teaching profession in the younger cohort. This pattern results from an increase in the overrepresentation of rural professional women and a complementary drop in the overrepresentation of Manila professional women in the teaching profession.

In the paramedical field there is a reversal of the rural-urban pattern in the sex differential. Within the older cohort a higher overrepresentation of women is found in the rural areas compared to Manila, while in the younger cohort the opposite pattern is observed. A curvilinear pattern of female underrepresentation is noted for the traditional medical professions. There is also an increased rural-urban differential in the younger cohort in engineering-related activities brought about by a higher rate of increase in female underrepresentation in Manila than in the rural areas. Finally, the category "other professionals" demonstrates an increasing female underrepresentation with decreasing rurality.

Class of Worker

In Table 7 are presented sex differentials in class of worker status by age and residence. Unpaid family work and self-employment on own account cover the work roles of seven out of ten employed rural women (38 and 34 percent, respectively). Twenty-seven percent of employed rural women are working for wage and salary and over two-thirds of these women are employed in private industry. As one proceeds from the rural areas to Manila, there is a drop in the percentage of employed women who are self-employed and a substantial drop in the percentage who are unpaid family workers. The level of female unpaid family work in Manila is less than one-seventh that found in the rural areas. Conversely, the level of female wage and salary employment in Manila is two and one half times that found in rural areas. There is a direct relationship between the urbanity of residence and employment in the private sector, while women in provincial urban areas have a higher level of government employment than women in Manila.

The index of dissimilarity between the class of work distributions for Filipino men and women, respectively, is highest in the rural areas and lowest in provincial urban areas with Manila lying between. The large delta in the rural sector reflects greatly the relatively larger concentration of women in unpaid family work and the larger concentration of men in self-employment. This pattern, no doubt, mirrors the concentration of women in farm laborer and men in farmer and farm manager work roles noted previously. Employed rural women also tend to be found somewhat less often in wage and salary jobs in the private sector and slightly more in governmental wage and salary positions relative to Filipino men.

Although Filipino women generally are found relatively more often in unpaid family worker jobs than men, this is far less the case in the urban

areas of the nation than in the rural areas. On the other hand, the relative underrepresentation of women in the self-employed class in the rural sector is reversed in the urban setting. In Manila female self-employment is 12 percent above that of men residing in Manila. The relatively lower concentration of women in wage and salary positions noted in the rural areas increases in the urban sectors. However, this pattern reflects a lower relative concentration of women in the private sector in the urban areas combined with a stable higher concentration of women compared to men in the governmental sector.

When age cohort differences are examined, we find virtually no difference between younger and older cohorts of employed rural women in unpaid family work. On the other hand, there is evident a 14 percent lower participation in self-employment compensated by a higher participation in both private (15 to 21 percent) and governmental (3 to 10 percent) jobs. Of older employed rural women engaged in wage or salary work, 83 percent are in the private sector compared to 69 percent of the younger wage and salary women.

The rural-urban difference in the percentage of women engaged in unpaid family work or self-employed is slightly greater among the younger than the older cohort of women, reflecting the relatively greater drop in female participation in these jobs in the urban areas. There is also evidence of an expansion of the rural-urban hiatus in female wage and salary employment in the younger cohort (46 vs. 37 percent). This, however, reflects an increase in the rural-urban difference in female private wage and salary employment and a decrease in the rural-urban difference in governmental wage and salary employment among women.

The difference in the index of dissimilarity between rural areas and Manila is relatively larger in the younger than in the older cohort. The index is slightly higher in the younger than older cohort in the rural areas;

in Manila the index for the younger cohort is about seven points lower than for the older cohort. The degree of overrepresentation of rural women in unpaid family work and their underrepresentation in self-employment diminishes from the older to the younger cohorts. There is evidence of a higher degree of rural female underrepresentation in private wage and salary employment in the younger cohort. At the same time, the slight underrepresentation of older rural women in governmental wage and salary roles is reversed among the younger cohort of rural women. Among younger rural women the level of participation in governmental wage and salary positions is more than 6 percent higher than for rural men.

When rural-urban differences in the sex differential are examined across class of worker strata, there is evidence of a slight contraction of the rural-urban difference in female overrepresentation in unpaid family work in the younger cohort. Likewise, the rural-urban difference in female underrepresentation in private wage and salary employment decreases from 21 percent in the older cohort to 10 percent in the younger cohort. Only minimal change is noticeable across the age cohorts in a rural-urban comparison of sex differentials in governmental wage and salary employment. However, in Manila there is increased overrepresentation of females in governmental wage and salary employment in the younger cohort, whereas in rural and provincial urban areas overrepresentation in the younger cohort constitutes a reversal of the underrepresentation found in the older age cohort.

CONCLUSIONS

No useful purpose would be served by a substantial reiteration of the numerous findings of this analysis. It is readily apparent that the dynamics of modernization in the Philippines setting is producing a diversity and complexity of response and transformation in the respective role

distributions of Filipino men and women, respectively. The underlying currents in the process of transformation of sex role distributions appear to come under the rubric of what Guyot (1969) has labeled "creeping urbanism," as well as ruralization of the city and bureaucratization of the work setting in Manila.

In the rural hinterland women are primarily concentrated in the agricultural sectors; however, their participation in this sector lies primarily as unpaid farm laborers complementing the farmer/farm manager occupational roles dominated by rural men. Nonetheless, rural women exhibit a relatively higher propensity than rural men towards participation in non-agricultural work roles with the exception of transport and clerical work. Thus, rural women are overrepresented in the crafts (primarily textile), sales, service, the professions and administrative work. Furthermore, the overrepresentation in the above occupations is higher in the younger rural generation with the exception of the sales work role. Although rural women participate less in governmental wage and salary employment than in the private sector, they tend to be overrepresented in the governmental sector and underrepresented in private wage and salary roles. This pattern is intensified in the younger generation.

In provincial urban areas female intensification in sales, professional/technical and undomestic service work roles as well as governmental employment is higher than is found in the rural hinterland. At the same time, their relative underrepresentation in nontextile manufacturing, construction, transport and private wage and salary employment is likewise higher in provincial urban centers than in the rural setting.

The above pattern would appear to reflect "creeping urbanism" of the diffusion of modernization into the hinterland; yet, the response is sex

biased. Emergent nonagricultural roles associated with industrialization, the transport revolution and increased construction activity are primarily filled by men. Moreover, to the extent that these roles are largely located in the private sector, the overrepresentation of men in these pursuits also implies their overrepresentation in private wage and salary employment. Creeping urbanism for Filipino women in the hinterland signifies their increased relative concentration in activities associated with increased market participation, formal education of the young, and medical succor to the hinterland population. The relatively greater female concentration in the upper rung of the educational hierarchy in education and medical science curricula, participation in nondomestic service as compared to men in the hinterland lends support to this contention, as does the relatively greater representation of females in governmental wage and salary employment.

The higher overrepresentation of females in commercial activity and education work roles in provincial urban as opposed to rural areas most likely reflects the concentration of marketing and educational facilities in the urban centers in the hinterland. Relatively greater female intensity in the above roles in the younger generation probably is indicative of the expansion of education, public health and localized small-scale marketing operations in the urban centers of the hinterland.

The Manila context presents a mosaic of augmented governmental and private bureaucratization, increased industrialization, an expanded transportation and communications network, heightened export activity, seats of learning and government activity, yet also a ruralized bazaar sector. The relatively greater concentration of Manila females in sales, service (especially domestic), textile manufacturing, clerical and professional work roles as well as self-employment, unpaid family work and public wage and

salary suggests an articulation between female work roles and the expansion of the public bureaucracy as well as the inflationary character of the bazaar sector.

The work roles of Manila men, on the other hand, appear to be associated largely with emergent industrialization, heightened construction activity, the widespread necessity for transportation in the metropolitan center, expanded export activity, and generally more expansive private sector. As such, Manila men are overrepresented in nontextile manufacturing, construction, transport, and stevedoring as well as a greater overrepresentation in the private sector generally. Thus, what is considered to be the most modernized milieu in the Philippines produces a diverse set of consequences for the role distributions of its male and female residents, respectively. Moreover, there is considerable evidence in the younger cohort that as manufacturing becomes more diversified, i.e., shift is away from a textile-dominated industry, and sales becomes bureaucratized, they become less female intensive. In other words, there is a hiatus between the emergence of such new roles and the accessibility of women to them. One final note, and that is that women do not appear to be unduly underrepresented in the administrative/executive stratum. No doubt, a considerable part of this pattern could be due to the management by wives of family-owned enterprises.

The seeming complexity of the response of sex role distributions to modernization necessitates more detailed analysis than was presented in this investigation. As such, our research can only be a beginning. Further inquiry needs to be directed towards a clearer articulation of the various components of modernization and their respective impacts on various sex role distributions of relevance. It is clear from this analysis that varying types of modernization processes have diverse ramifications for the role distributions of men and women, respectively.

Attention also needs to be given to the migration factor. It has often been suggested in the Philippine context that migrant women to Manila often are recruited into the domestic service sector. Conversely, given the concentration of advanced educational facilities in the metropolitan Manila area, it is suggested that rural children are educated by personnel imbued with urban attitudes and values. In fact, our research indicates that women more than men are disproportionately engaged in teaching in the rural hinterland, a sizable proportion of whom were trained in the Manila intellectual complex. Are there differential patterns of skill utilization for men and women and how do they vary by age and residence? Our analysis did not permit an assessment of the extent to which degree holders were employed in the field in which they were trained and how the two sexes might vary in this respect.

To what degree are the intergenerational occupational mobility regimes of males and females similar and how might the differences vary dependent on whether the individuals were from the agricultural or nonagricultural sector respectively? What differences are evident within the constituent substrata of these two major occupational groupings?

In conclusion, a full portrayal of the transformation of male and female role distributions in the process of modernization requires more detailed knowledge of the speed, training and direction of role shifts; any lags that may be evident between males and females and specifically where in the role structure they are located; the conditions facilitating or impeding synchonous role transitions for men and women; and, finally, the implications of diverse patterns of role transformation for the society itself and for its members.

Table 1. Sex Differentials in Literacy by Age and Residence: Philippines, 1970.

Sex	Age and Residence								
	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Percentage								
Male	97.4%	93.1%	77.5%	98.5%	95.7%	85.0%	94.3%	86.2%	62.7%
Female	95.2	89.8	71.7	97.5	95.0	83.2	89.1	78.3	51.9
	Difference (Female-Male)								
	-2.2	-3.3	-5.8	-1.0	-0.7	-1.8	-5.2	-7.9	-10.8

Sources: Philippines National Census and Statistics Office, 1974a: Table III-4;
Philippines National Census and Statistics Office, 1974b: Table III-4.

Table 2. Sex Differentials in Educational Attainment by Age and Residence: Philippines, 1970.

Sex and Level of Educational Attainment	Age and Residence								
	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Percentage Distribution								
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	2.8	6.3	19.5	1.5	3.5	11.7	7.0	12.7	34.2
1-4 years	7.9	17.3	36.6	4.9	12.2	32.3	13.2	26.0	39.8
5-7 years	20.4	24.9	27.2	17.2	25.3	34.4	25.6	26.4	18.2
1-3 years high school	12.3	12.3	7.5	13.5	14.5	9.6	9.0	8.4	3.5
4 years high school	23.6	16.0	4.7	24.0	17.4	5.9	20.9	11.1	2.3
1-3 years college	12.7	9.0	2.2	16.1	11.5	3.0	7.5	4.7	0.9
4 years college or more	20.3	14.2	2.3	22.8	15.6	3.1	16.8	10.7	1.1
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	4.1	9.1	24.7	2.2	4.5	14.6	11.4	20.2	45.3
1-4 years	11.5	21.4	36.7	7.5	13.5	30.7	22.0	31.7	38.6
5-7 years	25.1	30.0	26.8	25.0	31.4	37.5	31.1	25.4	12.2
1-3 years high school	10.5	11.0	5.3	13.2	13.4	7.7	7.8	6.6	1.8
4 years high school	27.3	8.8	2.4	19.6	12.0	3.4	15.2	6.9	0.9
1-3 years college	7.6	6.2	1.4	11.7	7.8	1.9	3.9	3.0	0.5
4 years college or more	13.9	13.5	2.7	20.8	17.4	4.2	8.6	6.2	0.7
	Difference (Female - Male)								
None	+0.3	+2.8	+5.2	+0.7	+1.0	+2.9	+4.4	+7.5	+11.1
1-4 years	+3.6	+4.1	+0.1	+2.6	+1.3	-1.6	+8.8	+5.7	- 1.2
5-7 years	+4.7	+5.1	-0.4	+7.8	+6.1	+3.1	+5.5	-1.0	- 6.0
1-3 years high school	-0.8	-1.3	-2.2	-0.3	-1.1	-1.9	-1.2	-1.8	- 1.7
4 years high school	+3.7	-7.2	-2.3	-4.4	-5.4	-2.5	-5.7	-4.2	- 1.4
1-3 years college	-5.1	-2.8	-0.8	-4.4	-3.7	-1.1	-3.6	-1.7	- 0.4
4 years college or more	-6.4	-0.7	+0.4	-2.0	+1.8	+1.1	-8.2	-4.5	- 0.4
	Index of Dissimilarity								
	12.3	12.0	5.7	11.1	10.2	7.1	18.7	13.2	11.1

Sources: Philippines National Census and Statistics Office, 1974a: Table III - 6;
Philippines National Census and Statistics Office, 1974b: Table III - 6.

Table 3. Sex Differentials in Major Field of Study of Associate, College and Post-Graduate Degree Holders by Age and Residence: Philippines, 1970.

Sex and Major Field of Study	Age and Residence								
	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Percentage Distribution								
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Liberal Arts	9.7	9.1	6.9	10.4	9.0	6.0	8.0	8.5	6.6
Law	12.2	10.8	6.1	7.7	6.4	4.1	19.8	16.8	9.1
Education	8.0	20.0	44.7	6.7	18.2	41.9	12.1	26.0	52.2
Medical Science	6.3	6.4	3.7	5.5	4.8	2.9	8.8	10.7	5.4
Natural Science	0.8	0.6	0.4	1.0	0.7	0.4	0.8	0.9	1.0
Engineering	21.6	18.3	14.4	24.6	20.9	16.7	14.0	13.1	8.4
Commerce	40.1	32.0	18.2	42.8	36.0	21.1	34.5	23.9	12.1
Agriculture	1.3	2.8	5.6	1.3	4.0	6.9	2.0	0.1	5.2
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Liberal Arts	14.0	8.8	4.0	8.1	6.4	3.0	5.3	3.6	8.0
Law	1.5	1.1	0.4	1.4	1.0	0.5	1.8	1.0	0.4
Education	41.8	60.8	81.5	31.3	52.6	76.7	64.0	73.6	81.4
Medical Science	15.9	13.1	7.1	15.2	12.8	7.7	19.0	16.2	7.1
Natural Science	1.2	0.8	0.3	1.6	1.1	0.5	0.6	0.3	0.3
Engineering	1.2	0.9	0.6	1.6	1.2	0.8	0.5	0.3	0.6
Commerce	24.3	14.3	5.6	40.6	24.7	10.2	8.7	4.9	1.7
Agriculture	0.1	0.2	0.5	0.2	0.2	0.6	0.1	0.1	0.5
	Difference (Female - Male)								
Liberal Arts	+ 4.3	- 0.3	- 2.9	- 2.3	- 2.6	- 3.0	- 2.7	- 4.9	+ 1.4
Law	-10.7	- 9.7	- 5.7	- 6.3	- 5.4	- 3.6	-18.0	-15.8	- 8.7
Education	+33.8	+40.8	+36.8	+24.6	+34.4	+34 8	+51.9	+47.6	+29.2
Medical Science	+ 9.6	+ 6.7	+ 3.4	+ 9.7	+ 8.0	+ 4.8	+10.2	+ 5.5	+ 1.7
Natural Science	+ 0.4	+ 0.2	- 0.1	+ 0.6	+ 0.4	+ 0.1	- 0.2	- 0.6	- 0.7
Engineering	-20.4	-17.4	-13.8	-23.0	-19.7	-15.9	-13.5	-12.8	- 7.8
Commerce	-15.8	-17.7	-12.6	- 2.2	-11.3	10.9	-25.8	-19.0	-10.4
Agriculture	- 1.2	- 2.6	- 5.1	- 1.1	- 3.8	- 6.3	- 1.9	0.0	- 4.7
	Index of Dissimilarity								
	48.1	47.7	40.2	34.9	42.8	39.7	62.1	53.1	32.3

Sources: Philippines National Census and Statistics Office 1974a: Table III - 10;
Philippines National Census and Statistics Office 1974b: Table III - 10.

Table 4. Sex Differentials in Industrial Roles by Age and Residence: Philippines, 1970.

Sex and Industrial Role Distribution	Age and Residence								
	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Percentage Distribution								
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	1.8	21.5	77.6	1.6	18.3	76.0	1.8	30.7	83.1
Mining and Quarrying	0.2	0.6	0.8	0.2	0.7	0.9	0.5	0.5	0.4
Textiles	2.8	3.5	0.8	3.0	4.7	1.1	2.8	2.0	0.4
Other Manufacturing	17.9	13.0	3.5	20.2	15.4	4.2	15.4	9.4	25.
Electricity and Gas	1.1	1.1	0.2	1.3	1.2	0.2	0.9	1.0	0.1
Construction	9.4	10.3	4.8	9.1	10.1	4.5	10.4	10.5	5.0
Commerce	15.9	11.0	2.5	14.0	10.5	2.5	18.4	12.6	2.3
Transport	18.4	12.9	3.9	19.6	15.6	5.1	12.4	6.7	1.5
Personal Services	5.0	3.2	0.7	5.2	3.6	0.8	7.3	3.6	0.7
Other Services	27.5	22.9	5.1	25.7	19.9	4.7	30.1	23.0	4.0
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	0.4	6.4	50.2	0.4	4.0	45.0	0.3	12.1	58.7
Mining and Quarrying	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
Textiles	20.3	19.0	20.1	18.8	20.1	23.6	17.4	16.6	15.5
Other Manufacturing	5.0	3.9	3.0	5.7	4.2	2.8	3.5	3.2	4.1
Electricity and Gas	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.0
Construction	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.3	0.1
Commerce	23.9	24.0	11.1	19.7	19.1	9.4	33.9	34.7	13.5
Transport	1.7	0.6	0.1	2.4	0.8	0.1	1.3	0.2	0.1
Personal Services	18.3	15.4	4.9	20.0	17.9	5.9	15.8	11.4	3.4
Other Services	30.2	30.4	10.3	32.6	33.5	13.0	27.5	21.3	4.5
	Difference (Female - Male)								
Agriculture	- 1.4	-15.1	-27.4	- 1.2	-14.3	-31.0	- 1.5	-18.6	-24.4
Mining and Quarrying	- 0.2	- 0.5	- 0.7	- 0.2	- 0.6	- 0.8	- 0.5	- 0.4	- 0.3
Textiles	+17.5	+15.5	+19.3	+15.8	+15.4	+22.5	+14.6	+14.6	+15.1
Other Manufacturing	-12.9	- 9.1	- 0.6	-14.5	-11.2	- 1.4	-11.9	- 6.2	+ 1.6
Electricity and Gas	- 1.0	- 1.0	- 0.1	- 1.1	- 1.1	- 0.2	+ 0.9	- 0.9	- 0.1
Construction	- 9.3	- 9.2	- 4.7	- 8.9	- 9.9	- 4.4	-10.1	-10.2	- 4.9
Commerce	+ 8.0	+13.0	+ 8.6	+ 5.7	+ 8.6	+ 6.9	+15.5	+22.1	+11.2
Transport	-16.7	-12.3	- 3.8	-17.2	-14.8	- 5.0	-11.1	- 6.5	- 1.4
Personal Services	+13.3	+12.2	+ 4.2	+14.8	+14.3	+ 5.1	+ 8.5	+ 7.8	+ 2.7
Other Services	+ 2.7	+ 7.5	+ 5.2	+ 6.8	+13.6	+ 8.3	- 2.6	- 1.7	+ 0.5

Table 4 (Continued)

	Index of Dissimilarity								
	41.5	48.2	37.3	43.1	51.9	42.8	39.5	44.5	31.1

Sources: Philippines National Census and Statistics Office, 1974a: Table II - 6;
Philippines National Census and Statistics Office, 1974b: Table II - 8.

Table 5. Sex Differentials in Occupation Roles by Age and Residence: Philippines, 1970.

Sex and Major Occupation	Age and Residence								
	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Percentage Distribution								
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, Tech. and Rel.	12.1	9.8	2.3	12.1	8.7	2.3	12.1	10.7	1.7
Administrative, Executive	4.2	3.7	0.7	2.8	2.4	0.6	7.6	5.7	0.8
Clerical	13.6	8.3	1.3	14.0	8.9	1.3	10.6	6.2	0.9
Sales	12.3	9.3	2.4	9.8	8.7	2.3	17.0	10.9	2.2
Transport	16.0	12.8	4.2	17.1	15.5	5.5	11.2	6.3	1.6
Crafts	22.5	22.7	8.8	24.2	25.2	9.3	20.2	18.5	7.6
Service	9.6	7.1	1.8	9.6	7.2	1.9	11.8	6.5	1.3
Stevedores	7.8	5.3	1.9	8.9	5.9	2.2	6.7	5.1	1.5
Farmers and Farm Managers	0.6	12.2	57.8	0.5	8.3	51.3	0.6	21.0	68.1
Farm Laborers	0.5	4.2	9.1	0.4	4.6	16.8	0.4	4.1	9.4
Other farm, Miners	0.8	4.6	9.7	0.6	4.6	6.5	1.8	5.0	4.9
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, Tech. and Rel.	19.5	23.8	9.2	20.1	24.7	11.3	20.1	19.4	4.1
Administrative, Executive	3.1	3.0	1.1	2.1	1.8	1.2	4.6	2.9	0.7
Clerical	16.0	8.5	1.2	20.5	12.4	1.9	7.7	1.9	0.4
Sales	20.4	22.5	11.1	15.6	17.1	9.3	32.9	34.6	13.8
Transport	1.0	0.4	0.1	1.2	0.6	0.1	1.0	0.2	0.1
Crafts	21.6	20.3	22.3	20.1	21.3	25.4	18.1	18.3	19.3
Service	17.3	14.8	4.9	19.3	17.6	5.9	14.2	10.4	3.2
Stevedores	0.8	0.5	0.2	0.8	0.6	0.2	1.1	0.3	0.2
Farmers and Farm Managers	0.1	1.7	9.8	0.1	0.7	5.8	0.0	4.8	18.0
Farm Laborers	0.1	4.3	39.6	0.1	3.0	38.5	0.3	6.8	39.6
Other Farm, Miners	0.1	0.2	0.5	0.1	0.2	0.4	0.0	0.4	0.6
	Difference (Female - Male)								
Professional, Tech. and Rel.	+ 7.4	+14.0	+ 6.9	+ 8.0	+16.0	+ 9.0	+ 8.0	+ 8.7	+ 2.4
Administrative, Executive	- 1.1	- 0.7	+ 0.4	- 0.7	- 0.6	+ 0.6	- 3.0	- 2.8	- 0.1
Clerical	+ 2.4	+ 0.2	- 0.1	+ 6.5	+ 3.5	+ 0.6	- 2.9	- 4.3	- 0.5
Sales	+ 8.1	+13.2	+ 8.7	+ 5.8	+ 8.4	+ 7.0	+15.9	+23.7	+11.6
Transport	-15.0	-12.4	- 4.1	-15.9	-14.9	- 5.4	-10.2	- 6.1	- 1.5
Crafts	- 0.9	- 2.4	+13.5	- 4.1	- 3.9	+16.1	- 2.1	- 0.2	+11.7
Service	+ 7.7	+ 7.7	+ 3.1	+ 9.7	+10.4	+ 4.0	+ 2.4	+ 3.9	+ 1.9
Stevedores	- 7.0	- 4.8	- 1.7	- 8.1	- 5.3	- 2.0	- 5.6	- 4.8	- 1.3
Farmers and Farm Managers	- 0.5	-10.5	-48.0	- 0.4	- 7.6	-45.5	- 0.6	-16.2	-50.1
Farm Laborers	- 0.4	+ 0.1	+30.5	- 0.3	- 1.6	+21.7	- 0.1	+ 2.7	+30.2
Other Farm, Miners	- 0.7	- 4.4	- 9.2	- 0.5	- 4.4	- 6.1	- 1.8	- 4.6	- 4.3

Table 5 (Continued)

	Index of Dissimilarity								
	25.4	34.2	59.1	30.0	38.3	59.0	26.3	39.0	57.8

Sources: Philippines National Census and Statistics Office, 1974a: Table II - 8.
Philippines National Census and Statistics Office, 1974b: Table II - 11.

Table 6. Sex Differentials in Professional and Technical Occupations by Age and Residence: Philippines, 1970.

Occupations	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Age and Residence								
	Percentage Distribution								
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Architects, engineers, surveyors	26.5	17.8	10.3	31.9	21.8	12.2	16.5	8.7	5.7
Chem., Phar., nat. and agric. sci.	1.7	3.4	4.4	2.1	5.0	5.9	0.9	2.2	2.8
Professors and teachers	11.5	33.2	62.7	9.9	30.7	61.9	16.5	39.9	62.8
Physicians, surgeons, and dentists	10.6	9.1	3.5	7.9	6.3	2.2	11.5	9.9	5.0
Nurses, midwives, prof. med. workers	1.6	2.5	3.2	1.6	2.3	2.6	2.2	3.2	6.7
Lawyers and jurists	13.8	10.7	3.9	7.8	6.4	2.2	21.0	15.8	4.8
Other prof. and rel. workers	34.3	23.3	12.0	38.8	27.5	13.0	31.4	20.3	12.2
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Architects, engineers, surveyors	0.3	0.3	0.1	0.6	0.6	0.2	0.0	0.0	0.0
Chem, phar, nat. and agric. sci.	6.1	3.2	1.0	6.3	3.2	1.2	1.7	2.9	1.1
Professors and teachers	58.7	77.8	88.0	49.9	72.4	87.8	75.2	81.8	68.2
Physicians, surgeons, and dentists	7.7	3.5	1.1	7.4	3.5	1.3	7.9	1.5	0.8
Nurses, midwives, prof. med. workers	11.0	8.5	7.7	15 6	10.6	7.0	6.1	11.4	27.4
Lawyers and jurists	1.8	0.8	0.2	1.9	0.8	0.2	1.7	0.6	0.0
Other prof. and rel. workers	14.4	5.9	1.9	18.3	8.9	2.3	7.4	1.8	2.5
	Difference (Female - Male)								
Architects, engineers, surveyors	-26.2	-17.5	-10.2	-31.3	-21.2	-12.0	-16.5	- 8.7	- 5.7
Chem., phar., nat. and agric. sci.	+ 4.4	- 0.2	- 3.4	+ 4.2	- 1.8	- 4.7	+ 0.8	+ 0.7	- 1.7
Professors and teachers	+47.2	+44.6	+25.3	+40.0	+41.7	+25 9	+58.7	+41.9	+ 5.4
Physicians, surgeons, and dentists	- 2.9	- 5.6	- 2.4	- 0.5	- 2.8	- 0.9	- 3.6	- 8.4	- 4.2
Nurses, midwives, prof. med. workers	+ 9.4	+ 6.0	+ 4.5	+14.0	+ 8.3	+ 4 4	+ 3.9	+ 8.2	+20.7
Lawyers and jurists	-12.0	- 9.9	- 3.7	- 5.9	- 5.6	- 2.0	-19.3	-15.2	- 4.8
Other prof. and rel. workers	-19.9	-17.4	-10.1	-20.5	-18.6	-10.7	-24.0	-18.5	- 9.7
	Index of Dissimilarity								
	61.0	50.6	29.8	58.2	50.0	30.3	63.4	50.8	26.1

Table 7. Sex Differentials in Class of Worker by Age and Residence: Philippines, 1970.

Sex and Class of Worker Status	Age and Residence								
	Total (25-64)			Younger (25-34)			Older (55-64)		
	Manila	Other Urban	Rural	Manila	Other Urban	Rural	Manila	Other Urban	Rural
	Percentage Distribution								
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wage and salary: Private	70.9	53.7	24.7	76.7	63.1	28.5	57.9	37.4	17.8
Government	14.2	16.8	4.5	12.1	12.9	4.0	19.0	18.8	3.6
Own account: Self-employed	12.1	25.8	64.5	8.8	19.7	57.7	18.7	39.7	74.9
Employer	2.1	2.1	1.4	1.4	1.6	1.2	4.2	3.3	1.6
Unpaid family worker	0.7	1.6	4.9	1.0	2.7	8.6	0.2	0.8	2.1
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wage and salary: Private	50.7	36.9	18.5	59.6	45.7	21.4	34.0	24.8	15.1
Government	18.2	22.2	8.4	17 8	22.3	10.4	20.7	16.1	3.1
Own account: Self-employed	23.9	28.6	33.6	16.8	21.7	28.7	34.0	42.8	42.8
Employer	2.4	2.7	1.6	1.5	2.1	1.6	5.4	3.6	1.9
Unpaid family worker	5.0	9.6	37.9	4.3	8.2	37.9	5.9	12.7	37.1
	Difference (Female - Male)								
Wage and salary: Private	-20.4	-16.8	- 6.2	-17.1	-17.4	- 7.1	-23.9	-12.6	- 2.7
Government	+ 4.0	+ 5.4	+ 3.9	+ 5.7	+ 9.4	+ 6.4	+ 1.7	- 2.7	- 0.5
Own account: Self-employed	+11.8	+ 2.8	-30.9	+ 8.0	+ 2.0	-29.0	+15.3	+ 3.1	-32.1
Employer	+ 0.3	+ 0.6	+ 0.2	+ 0.1	+ 0.5	+ 0.4	+ 1.2	+ 0.3	+ 0.3
Unpaid family worker	+ 4.3	+ 8.0	+33.0	+ 3.3	+ 5.5	+29.3	+ 5.7	+11.9	+35.0
	Index of Dissimilarity								
	20.4	16.8	37.1	17.1	17.4	36.1	23.9	15.3	35.3

Source: Philippines National Census and Statistics Office, 1974a. Table II-4;
Philippinew National Census and Statistics Office, 1974b: Table II-5.

REFERENCES

Boserup, Ester. 1970. Woman's Role in Economic Development. London, England: George Allen and Unwin.

Castillo, Gelia T. 1976. The Filipino woman as manpower: The image and the empirical reality. Paper presented at the seminar on labor supply under the joint sponsorship of the Council for Asian Manpower Studies and the Organization of Demographic Associates. Makati, Rizal, Philippines, June 21-25.

Castillo, Gelia T., and Sylvia Hilomen-Guerrero. 1969. The Filipino woman: A study in multiple roles. Journal of Asian and African Studies. pp. 18-29.

Danforth, Sandra C. 1975. Women's roles in development. Unpublished paper presented at the annual meeting of the American Political Science Association, San Francisco, September.

Eisenstadt, S. N. 1957. Sociological aspects of political development in underdeveloped countries. Economic Development and Cultural Change 5:289-307.

Fox, Robert. 1963. Men and women in the Philippines. In Barbara E. Ward (ed.), Women in the New Asia. Paris: UNESCO Publications.

Germain, Adrienne. 1975. Status and role of women as factors in fertility behavior. Studies in Family Planning 6(7):192-200.

Guyot, James F. 1969. Creeping urbanism and political development in Malaysia. In Robert T. Daland (ed.), Comparative Urban Research. Beverly Hills: Sage, pp. 124-161.

Hunt, Chester L. 1965. Female occupational roles and urban sex ratios in the United States, Japan, and the Philippines. Social Forces 43 (March): 407-17.

Jacobson, Helga E. 1974. Women in Philippine society: More equal than many. In Carolyn J. Matthiasson (ed.), Many Sisters: Women in Cross-Cultural Perspective. New York: The Free Press.

Knaster, Meri. 1976. Women in Latin America: The state of research, 1975. Latin American Research Review XI(1):3-74.

Laquian, Aprodicio. 1973. Urban tension in Southeast Asia in the 1970s. In W. Howard Wriggins and James F. Guyot (eds.), Population, Politics and the Future of Southern Asia. New York: Columbia University Press.

Matras, Judah. 1973. Populations and Societies. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Philippines National Census and Statistics Office. 1974a. Philippines 1970 Census of Population and Housing. National Summary. Vol. II. Manila, Philippines, December.

Philippines National Census and Statistics Office. 1974b. Manila 1970 Census of Population and Housing. Final Report, Vol. I. Manila, Philippines, April.

Smelser, Neil J. 1963. Mechanisms of change and adjustment to change. In B. F. Hoselitz and W. E. Moore (eds.), Industrialization and Society. The Hague: UNESCO-Mouton, pp. 32-54.

Smelser, Neil J., and Seymour Martin Lipset. 1966. Social structure, mobility, and economic development. In Neil J. Smelser and Seymour Martin Lipset (eds.), Social Structure and Mobility in Economic Development. Chicago: Aldine Publishing Company, pp. 1-50.

Tinker, Irene. 1975. The adverse impact of development on women. Unpublished paper presented at the American Association for the Advancement of Science Seminar on Women in Development, Mexico City, June.

Youssef, Nadia Haggag. 1971. Social structure and the female labor force: The case of women workers in Muslim Middle Eastern countries. Demography 8(4):427-440.